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REPORT

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MCP Supplemental Phase II Report for the Allendale School Property

General Electric Company
Pittsfield, Massachusetts

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BBL
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engineers & scientists

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1. Introduction

1.1 General

This *MCP Supplemental Phase II Report for the Allendale School Property* (Supplemental Phase II Report) summarizes the activities performed by the General Electric Company (GE) over the last several months concerning the presence of polychlorinated biphenyls (PCBs) and other hazardous constituents at the Allendale School Property in Pittsfield, Massachusetts (Site No. 1-0960). This Supplemental Phase II Report has been prepared consistent with the *MCP Supplemental Phase II Scope of Work for the Allendale School Property* (Supplemental Phase II SOW), dated November 1996, as conditionally approved by the Massachusetts Department of Environmental Protection (MDEP) via letter dated March 5, 1997. This report is the second investigation report completed to date for the Allendale School Property under the provisions of the Massachusetts Contingency Plan (MCP) (310 CMR 40.0000). A previous report, entitled *MCP Interim Phase II Report for the Allendale School Property* (Interim Phase II Report, Blasland & Bouck, January 1993), was prepared consistent with the MCP and provided a significant volume of information toward the characterization of current site conditions. To further supplement the information presented in that report, additional field investigations were performed between April and July 1997 and are summarized herein. These two reports contain the majority of information necessary to satisfy MCP requirements concerning the investigation component of an MCP Phase II Comprehensive Site Assessment, although some remaining data needs have been identified and are presented herein. This report also represents a proposal for filling those data needs. Additional background information is presented below.

1.2 Background

The Allendale School Property is located to the north of the GE facility across the Tyler Street Extension, and is bordered on the other three sides by residential areas (Figure 1). The school occupies approximately 30,000 square feet on approximately 12 acres. At the time of the school's construction in 1950, GE and the City of Pittsfield

entered into an agreement under which GE allowed the City to remove soil material from GE property for use as fill material at the school property.

Concerns associated with the Allendale School Property were initially identified by the MDEP during construction of the Pittsfield Generating Company Facility (PGC Facility, formerly known as the Altresco Corporation Cogeneration Facility), located on GE property southeast of the school property. The presence of PCBs in soil at the GE property, and the available information concerning the prior use of fill material at the property, led to MDEP concerns regarding the potential presence of PCBs in the fill at the Allendale School Property. In response, the MDEP performed a soil and surface water sampling program for this area in January 1990, from which low levels of PCBs were detected in the surficial soils in the southeast corner of the Allendale School Property. The MDEP subsequently established a PCB concentration of 2 parts per million (ppm) (dry weight) as the "level of concern" for surficial soils in this area. While two samples collected from the school property by the MDEP exceeded this concentration, surface water sampling results did not detect PCBs.

The detection of PCBs above 2 ppm in soils by the MDEP at the property led to several subsequent sampling events by GE to characterize the presence and extent of PCBs, as well as to assess the potential presence of other hazardous constituents at the site. These activities were conducted between April and September 1990. As a result of these investigations, GE evaluated a range of options to reduce the potential for human contact with soils containing PCBs above the MDEP's level of concern (i.e., 2 ppm). GE's evaluation was presented in a document entitled *Study of Potential Remedial Options for PCB-Containing Soils at the Allendale School Property* (Blasland & Bouck, September 1990). In a March 15, 1991 letter to GE, the MDEP conditionally approved the containment/capping option presented in that report as an MCP Short-Term Measure (STM). As conditionally approved by the MDEP, the STM involved the placement of a geotextile layer overlain with a minimum of 2 feet of "clean" soil over those areas where soil PCB concentrations exceeded 2 ppm within the top 3 feet of existing soil. In addition, improvements to the existing surface water drainage system in the area were part of the STM.

The MDEP's approval conditions were incorporated into a revised version of the report entitled *Study of Potential Remedial Options for PCB-Containing Soils at rhe Allendale School Property* (Blasland & Bouck, April 1991). Construction activities were initiated and completed in the summer of 1991, in accordance with the STM approved by the MDEP.

In a letter dated March 6, 1992, the MDEP classified the Allendale School Property as a priority disposal site under the MCP, required that further remedial response action be performed, and required that a Scope of Work (SOW) for a Phase II Comprehensive Site Assessment be submitted within 60 days of the date of the letter. On May 4, 1992, GE submitted to the MDEP a Phase II SOW to address data needs associated with the Phase II Comprehensive Site Assessment. The activities proposed in that document were conditionally approved by the MDEP in a letter dated June 30, 1992 and subsequently initiated thereafter.

In January 1993, GE submitted to the MDEP the Interim Phase II Report. On September 13, 1996, after review of that document, the MDEP directed GE to: (a) submit an Imminent Hazard Evaluation Proposal for surface and near-surface soil sampling and analysis at the Allendale School Property to evaluate whether a potential "imminent hazard" exists; (b) submit thereafter a Supplemental Phase II SOW proposing additional investigations; and (c) upon completion of the additional investigations, submit a Supplemental Phase II Report for the property. On September 27, 1996, GE submitted an *Imminent Hazard Evaluation Proposal,* which was conditionally approved by the MDEP in a letter dated October 10, 1996. In support of the imminent hazard evaluation, GE collected soil samples from the surface (0- to 6-inches) and near-surface (6- to 12-inches) from 114 grid node locations based on a 50-foot grid. Concentrations of PCBs were greater than 2 ppm in only two out of 114 locations, at both the 0- to 6-inch and 6- to 12-inch intervals (AS-96-76, AS-96-80). None of the 114 surface samples had PCB concentrations greater than the MCP potential imminent hazard threshold of 10 ppm, and only one out of 114 of the near-surface samples had a PCB concentration greater than 10 ppm (16 ppm, location AS-96-80, 6- to 12-inch interval). On December 6, 1996, GE submitted the requested *Imminent Hazard Evaluation Report.* Based on the

available information, GE concluded that a potential imminent hazard as defined in the MCP (310 CMR 40.0321(2)(b)) does not exist at the schoolyard.

On November 18, 1996, GE submitted the Supplemental Phase II SOW, which was conditionally approved by the MDEP in a letter dated March 5, 1997. In accordance with the Supplemental Phase II SOW, as well as the contents of the MDEP's March 5, 1997 conditional approval letter, this report summarizes the activities performed between April and July 1997. In general, the activities performed during this time frame included sampling and analysis of soils, installation of monitoring wells, sampling and analysis of groundwater, and sampling and analysis of stormwater/sediments. Additional information regarding the scope and results of these activities are presented in subsequent sections of this report. The format of this report is discussed below.

1.3 Format of Document

The remainder of this Supplemental Phase II Report summarizes each of the activities completed to date by GE, either as proposed in the Supplemental Phase II SOW, or as conditionally approved in subsequent correspondence from the MDEP. The results of the supplemental investigations are discussed, as appropriate, in association with data that were presented in prior reports. Additionally, a supplement will be prepared and submitted shortly that contains the laboratory analytical summary data sheets from the 1996-7 investigations and a summary of the data evaluation of those data sets (using the Tier I/Tier II data evaluation process outlined in the SAP/DCAQAP). The format and contents of the remainder of this report are as follows:

- Section 2 of this document provides a summary of the supplemental soil investigations for the Allendale School Property. The soil sampling effort was conducted to further define the horizontal and vertical extent of PCBs and fill materials at the property and obtain additional information on the presence of other non-PCB hazardous constituents at the property. As indicated in Section 2, the supplemental investigation activities were performed

between April 1997 and July 1997. Also included in this section is a discussion of soil sampling and analysis associated with the planned expansion to the school building.

- Section 3 describes the supplemental groundwater investigations, including the installation of additional groundwater monitoring wells, groundwater sampling and analysis involving new wells and select existing wells, and construction of a revised groundwater table contour map.

- Section 4 presents information concerning several miscellaneous activities associated with this property, including a discussion on background concentrations in soil and groundwater, collection and analysis of stormwater and sediment samples, information concerning the location of stormwater drains at and around the site, and a discussion regarding the possible source of polychlorinated dibenzofurans (PCDFs) that have been detected in certain soil samples.

- Section 5 provides a discussion regarding additional data needs and proposed activities to address such needs.

- Section 6 presents a proposed schedule for the activities to address additional data needs.

6. Schedule for Future Activities

Following MDEP review and approval of this Supplemental Phase II Report, GE will initiate the proposed field activities. Once the results of these efforts are received. and it is determined that the identified data needs have been adequately addressed., GE will prepare an addendum to this report. The addendum will summarize the recent investigations and, where appropriate, incorporate the existing information and provide updated evaluations.

Concurrent with the above-referenced addendum, GE will prepare a Risk Characterization SOW proposal to evaluate (in accordance with the MCP) potential risks to human health and the environment.

The addendum and Risk Characterization SOW will be submitted to the MDEP within six months following the MDEP approval of this report.